

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A lockbolt comprising:

a bolt shaft having a locking portion including a plurality of grooves around a surface of the bolt shaft and including a plurality of peaks at least some having a parallelogram shape and being disposed between the grooves; ~~and~~

a bolt head on a first end of the bolt shaft[.]; and

~~wherein said locking portion is configured to retain~~ a layer of sealant retained on said locking portion,

wherein said locking portion is configured ~~and to squeeze-out excess sealant so as to obtain an adhesive and sealing to form said layer of sealant on said surface.~~

2. (Previously Presented) The lockbolt according to claim 1, wherein the plurality of grooves extends in spiral directions helically around the surface of the bolt shaft.

3. (Previously Presented) The lockbolt according to claim 1, wherein the plurality of grooves includes a first group of spiral grooves that respectively extend in a clockwise spiral direction and a second group of spiral grooves that respectively extend in a counterclockwise spiral direction and intersect with said first group of spiral grooves.

4. (Previously Presented) The lockbolt according to claim 1, wherein the plurality of grooves includes a plurality of first grooves extending in a circumferential direction of the bolt shaft and a plurality of second grooves extending in a direction parallel to an axial direction such that the first and second grooves intersect with each other.

5. (Original) The lockbolt according to claim 1, wherein the parallelogram shape is a

diamond parallelogram shape.

6. (Original) The lockbolt according to claim 1, wherein the parallelogram shape is a pyramid shape with a four-sided base.

7. (Original) The lockbolt according to claim 1, wherein the parallelogram shape is a square or rectangular shape.

8. (Previously Presented) The lockbolt according to claim 1, wherein:  
a locking collar is configured to engage with the plurality of peaks of the locking portion.

9. (Previously Presented) The lockbolt according to claim 8, wherein when the locking collar is engaged with the locking portion, said sealant is spread out via the plurality of grooves to form said adhesive and sealing layer.

10. (Original) The lockbolt according to claim 1, wherein at least one groove opens to an outside at an end of the locking portion.

11. (Original) The lockbolt according to claim 1, wherein said grooves intersect with each other so that said grooves are interconnected with each other, and wherein at least one of said grooves extends to and opens at an open groove end at an axial end of said locking portion along an axial direction of the bolt shaft.

12. (Original) The lockbolt according to claim 1, wherein said locking portion excludes all annular circumferential grooves.

13. (Original) The lockbolt according to claim 1, wherein each of the peaks includes a parallelogram shape.

14. (Original) The lockbolt according to claim 1, further comprising:

a break-away portion connected to said locking portion.

15. (Original) The lockbolt according to claim 14, wherein said break-away portion includes a constricted neck encircled by a circumferential continuous groove.

16. (Currently Amended) A lockbolt system comprising:

a bolt shaft,

a bolt head on a first end of the bolt shaft, ~~and~~

a locking collar, and

a surface sealant layer on the bolt shaft,

wherein said bolt shaft has means for engaging the locking collar with the bolt shaft such that the locking collar is securely deformed in a locking manner thereby forcing a sealant to distribute and form ~~[[a]]~~ said surface sealant layer on the bolt shaft~~[[;]]~~, and squeezing-out excess sealant,

wherein said surface sealant layer forms an adhesive bond between said bolt shaft and said locking collar, and

wherein the means for engaging includes a plurality of grooves around a surface of the bolt shaft and includes a plurality of peaks at least some having a parallelogram shape and being disposed between the grooves.

17. (Canceled)

18. (Currently Amended) The lockbolt system according to claim ~~17~~ 16, wherein the plurality of grooves extends in spiral directions helically around the surface of the bolt shaft.

19. (Currently Amended) The lockbolt system according to claim ~~17~~ 16, wherein the plurality of grooves includes a first group of spiral grooves that respectively extend in a

clockwise spiral direction and a second group of spiral grooves that respectively extend in a counterclockwise spiral direction and intersect with said first group of spiral grooves.

20. (Currently Amended) The lockbolt system according to claim 17 16, wherein the plurality of grooves includes a plurality of first grooves extending in a circumferential direction of the bolt shaft and a plurality of second grooves extending in a direction parallel to an axial direction such that the first and second grooves intersect with each other

21. (Currently Amended) The lockbolt system according to claim 17 16, wherein the parallelogram shape is a diamond parallelogram shape.

22. (Currently Amended) The lockbolt system according to claim 17 16, wherein the parallelogram shape is a pyramid shape with a four-sided base.

23. (Currently Amended) The lockbolt system according to claim 17 16, wherein the parallelogram shape is a square or rectangular shape.

24. (Currently Amended) The lockbolt system according to claim 17 16, wherein when the locking collar is engaged with the locking portion, said sealant is spread out via the plurality of grooves to form said surface sealant layer.

25. (Currently Amended) The lockbolt system according to claim 17 16, wherein at least one groove opens to an outside at an end of the bolt shaft.

26. (Currently Amended) The lockbolt system according to claim 17 16, wherein said grooves intersect each other so that said grooves are interconnected with each other, and wherein at least one of said grooves extends to and opens at an open groove end at an axial end of said locking portion along an axial direction of the bolt shaft.

27. (Currently Amended) The lockbolt system according to claim 17 16, wherein

said locking portion excludes all annular circumferential grooves.

28. (Currently Amended) The lockbolt system according to claim ~~17~~ 16, wherein each of the peaks includes a parallelogram shape.

29. (Currently Amended) The lockbolt system according to claim ~~17~~ 16, further comprising:

means for breaking off a break-away portion connected to said locking portion.

30. (Original) The lockbolt system according to claim 29, wherein the means for breaking includes a constricted neck encircled by a circumferential continuous groove.

31. (New) The lockbolt according to claim 1, wherein the bolt shaft has a cylindrical shank portion and a smooth tapered portion, and wherein the smooth tapered portion separates the cylindrical shank portion from the locking portion.